District 9 Ground Control Plan Checklist

Mine Name: _____ ID: _____

Reviewer: _____ Date: _____

MPA No: _____ 2 Yr Review _____

§ 77.1000 Highwalls, pits and spoil banks; plans.

Each operator shall establish and follow a ground control plan for the safe control of all highwalls, pits and spoil banks to be developed after June 30, 1971, which shall be consistent with prudent engineering design and will insure safe working conditions. The mining methods employed by the operator shall be selected to insure highwall and spoil bank stability.

_____ The method of mining and the means to ensure highwall and spoil bank stability. A drawing may be necessary.

_____ General characteristic of the strata, including the name of coalbed or coalbeds being mined, and the thickness of coalbed. If more than one coalbed is being mined, thickness of strata between coalbeds.

_____ A typical cross-section drawing of the active pit. Include the following in drawing or narrative:

a. The slope of the ground to be mined.
b. The maximum height and proposed angle of highwall.
c. Maximum height and angle of spoil banks.
d. The width of the pit in feet.
e. The dimensions and relative locations of benches, if used. The width and height of benches shall be of sufficient width to prevent any material above the bench from sliding or falling over the highwall. (See Modified Ritchie Criteria)

_____ Topographic map showing the general location of the mine, haulage roads, pits and proposed mining; and all worked out and abandoned areas. The scale can be more than 500 feet to the inch but not too excessive.

Brook 10b

_____ Underground mine workings within 1,000 feet of the active areas of the mine. The following safety precautions should be included:

a. Identify underlying workings on the topographic map
b. No personnel or equipment should be permitted to work within 100 feet of the underlying works.
c. The underlying works should be exposed and backfilled with spoil to stabilize them (or any other no less effective method) before any personnel or equipment are permitted to work or travel over them.
d. All employees should be trained in the hazards that exist when working near underlying works.

_____ Gas wells and Pipelines within 1,000 feet of the active areas of the mine. The following safety precautions should be included:

a. Identify any gas wells and pipelines on the topographic map
b. Visibly mark the location of pipelines at 200-foot intervals through entire permit area
c. Insure a minimum of six feet of compacted material between the pipeline and any haul road or access road within the permit area.
d. Insure that no cuts will be created within 100 feet or one times the depth of the cut (whichever is greater) of any pipeline.

_____ Draining of water from the pit area as it relates to control of highwall and spoil bank stability.

_____ A list of equipment and capacities used in overburden and coal removal.

§ 77.1000-1 Filing of plan.

The operator shall file a copy of such plan, and revisions thereof, with the Coal Mine Health and Safety District office for the District in which the mine is located, and shall identify the name and location of the mine; the Mine Safety and Health Administration identification number if known; and the name and address of the mine operator.

_____ Name and location of the mine.

_____ Mine Safety and Health Administration identification number.

_____ The name and address of the mine operator.

_____ The name of the principal officer in charge of health and safety at the mine.

_____ Check all filed addendums and site-specific addendums to the filed ground control plan to ensure that they are needed and relevant.

_____ Check the filed ground control plan to ensure that the referenced geotechnical and slope stability studies are still needed and relevant.

_____ The pages are numbered for easy revision.

§ 77.1001 Stripping; loose material.

_____ Methods and equipment to control loose hazardous materials from the top of the highwall.

§ 77.1002 Box cuts; spoil material placement.

_____ When box cuts are made, the necessary precautions taken with the placement of spoil to minimize the possibility of spoil material rolling into the pit.

_____ Where materials rolling or falling of spoil banks can be hazardous to persons in that area, the spoil banks shall be sloped to the angle of repose or less, or barriers, baffle boards, screens, or other equivalent device shall be provided to protect the workmen.

§ 77.1003 Benches.

_____ If benches are not employed in the pit design, or if bench height is greater than 50 feet without a 25 foot wide bench, then documentation to justify the design that omits benches or have a height grater than 50 foot, must be included in the plan. (See Tech Support Evaluation of Surface Ground Control Plan for more information concerning bench heights and widths.)

_____ Complex and detailed justifications and documentation of highwall heights over 50 feet may be forwarded to Tech Support in Pittsburgh for review.

_____ On terrain where removal of the loose material above the highwall cannot be sloped (such as steeply pitching hillsides) to prevent materials from sliding or falling over the highwalls, benches, barriers, baffle boards, screens or other device that afford equivalent protection shall be provided above the highwall in active mines.

§ 77.1004 Ground control; inspection and maintenance; general.

_____ Frequency and records of examinations of highwalls, banks, benches, and terrain sloping into the working areas after rain freeze or thaw. (Not necessarily required because stated in 77.1713)

_____ Specify actions to be taken when overhanging highwalls and banks or other hazards exist, examples:
a. Scaling and/or stripping
b. Barricading and/or posting
c. Withdrawing all personnel except those needed to correct the condition.

_____ Methods of posting dangerous highwalls, examples:
a. Berms or barricades
b. Cones, signs or flagging placed in the area. These should be unique to identify highwall hazards.

§ 77.1005 Scaling highwalls; general.

_____ Methods and equipment to scale hazardous material from highwalls.

§ 77.1006 Highwalls; men working.

_____ "Special safety precautions," as used in paragraph (c), shall include a thorough examination of the highwall or spoil bank for dangerous conditions and, if dangerous conditions are found, they shall be corrected before miners are permitted to work in such areas.

Additional special safety precautions to be taken when men are required to perform repair work between immobilized equipment and the highwall or spoil bank and such equipment may hinder escape from falls or slides may include:

a. Spotter to monitor highwall or spoil bank
b. Two-way radios to enhance communication
c. Additional manpower to shorten the time required to complete the task
d. Other equipment used to shield workers
e. Pull equipment to a safe location

_____ Minimum distance from highwalls and spoil banks that personnel and equipment will work or travel (over 25 feet).

_____ Berms of sufficient width, height, and distance from the toe of the highwall should be constructed to contain potential sloughing of highwall material and rockfalls, where necessary.

_____ Work should be performed perpendicular to highwalls, not parallel, where feasible.

_____ Staging, placement, and parking of equipment should minimize the exposure to highwalls and spoil banks. Vehicles, especially those not equipped with FOPS, should travel in the middle of the pit.

_____ Information on blasting designs, if necessary

_____ Recent Accidents concerning highwalls (last two years)

_____ Citations concerning highwalls in last two years (77.1000 to 77.1006)

_____ Check Mine Activity Form 2000-22, Line 17 for any Ground Control Plan comments for last two E01 inspections